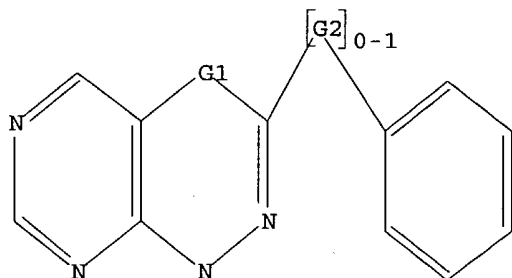


| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|-------|-------|--|-------|------------------|---------|------------------|
| L1 | 1690 | 544/48, 544/66, 544/112, 544/184, 514/222.8, 514/229.2, 514/243, 514/234.5 | USPAT | OR | OFF | 2004/11/29 14:47 |
| L2 | 27035 | kinase | USPAT | OR | OFF | 2004/11/29 14:47 |
| L3 | 153 | I1 and I2 | USPAT | OR | OFF | 2004/11/29 14:47 |

=> d l1

L1 HAS NO ANSWERS

L1 STR



G1 O,S,N

G2 O,S,N,CH2

Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 13:03:20 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 20 TO ITERATE

100.0% PROCESSED 20 ITERATIONS

6 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 132 TO 668

PROJECTED ANSWERS: 6 TO 266

L2 6 SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 13:03:31 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 526 TO ITERATE

100.0% PROCESSED 526 ITERATIONS

91 ANSWERS

SEARCH TIME: 00.00.01

L3 91 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

155.42

155.63

FILE 'CAPLUS' ENTERED AT 13:03:36 ON 29 NOV 2004

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FILE COVERS 1907 - 29 Nov 2004 VOL 141 ISS 23
FILE LAST UPDATED: 28 Nov 2004 (20041128/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3

L4 14 L3

=> d ibib abs hitstr tot

own work

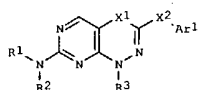
L4 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2004:414635 CAPLUS
 DOCUMENT NUMBER: 140:423712
 TITLE: Preparation of diazinopyrimidines for treating p38 MAP
 KINASE and FGFR kinase mediated disorders
 INVENTOR(S): Chen, Jian Jeffrey; Luk, Kin-Chun Thomas
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 39 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| US 2004097493 | A1 | 20040520 | US 2003-715666 | 20031118 |
| WO 2004046152 | A1 | 20040603 | WO 2003-271252 | 20031112 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, RW, BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, HR, ME, SN, TD, TG

PRIORITY APPLN. INFO.: US 2002-427652P P 20021118

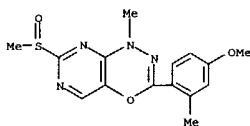
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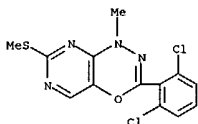
AB The title compds. [I; R1 = H, alkyl; R2 = alkyl, haloalkyl, aryl, etc.;
 R3 = H, alkyl, cycloalkyl, etc.; Ar1 = aryl; X1 = O, NR5, S (R5 = H, alkyl); X2 = a bond, O, NR6, S, CH2 (R6 = H, alkyl)], were prepared and formulated. E.g., a multi-step synthesis of the
 pyrimido[4,5-e]oxadiazine
 I [R1 = morpholino; R2 = H; R3 = Me; X1 = O; X2 = a bond; Ar1 = 2-ClC6H4]
 (starting from 5-iodo-4-chloro-2-methylthiopyrimidine and methylhydrazine)
 which showed IC50 of 0.189 μ M against p38 MAP kinase, was given.
 IT 691864-01-4P 691864-02-5P 691864-05-8P

L4 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

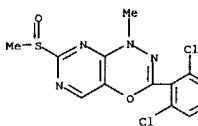
RN 691864-06-9 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazine,
 3-(4-methoxy-2-methylphenyl)-1-methyl-
 7-(methylsulfinyl)- (9CI) (CA INDEX NAME)



RN 691864-09-2 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazine, 3-(2,6-dichlorophenyl)-1-methyl-7-(methylthio)- (9CI) (CA INDEX NAME)



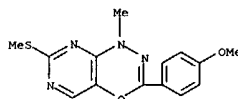
RN 691864-10-5 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazine, 3-(2,6-dichlorophenyl)-1-methyl-7-(methylsulfinyl)- (9CI) (CA INDEX NAME)



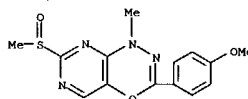
RN 691864-21-8 CAPLUS
 CN Phenol, 3-[[3-(2,6-dichlorophenyl)-1-methyl-1H-pyrimido[4,5-e][1,3,4]oxadiazin-7-yl]amino]- (9CI) (CA INDEX NAME)

L4 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

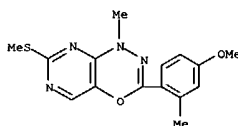
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 691864-21-8P 691864-26-3P 691864-27-4P
 691864-31-0P 691864-32-1P 691864-36-5P
 691864-37-6P 691864-40-1P 691864-41-2P
 691864-44-5P 691864-45-6P 691864-48-9P
 691864-49-0P 691864-51-4P 691864-52-5P
 RI: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (prepn. of pyrimido[4,5-e]oxadiazines for treating p38 MAP kinase and FGFR kinase mediated disorders)
 RN 691864-01-4 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazine, 3-(4-methoxyphenyl)-1-methyl-7-(methylthio)- (9CI) (CA INDEX NAME)



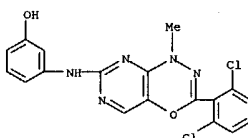
RN 691864-02-5 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazine, 3-(4-methoxyphenyl)-1-methyl-7-(methylsulfinyl)- (9CI) (CA INDEX NAME)



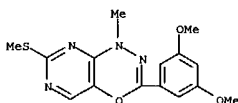
RN 691864-05-8 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazine,
 3-(4-methoxy-2-methylphenyl)-1-methyl-
 7-(methylthio)- (9CI) (CA INDEX NAME)



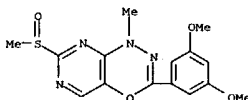
L4 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



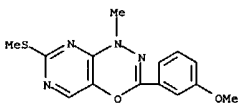
RN 691864-26-3 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazine, 3-(3,5-dimethoxyphenyl)-1-methyl-7-(methylthio)- (9CI) (CA INDEX NAME)



RN 691864-27-4 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazine, 3-(3,5-dimethoxyphenyl)-1-methyl-7-(methylsulfinyl)- (9CI) (CA INDEX NAME)

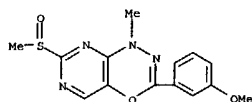


RN 691864-31-0 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazine, 3-(3-methoxyphenyl)-1-methyl-7-(methylthio)- (9CI) (CA INDEX NAME)

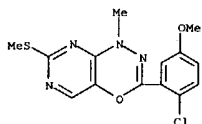


RN 691864-32-1 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazine, 3-(3-methoxyphenyl)-1-methyl-7-(methylsulfinyl)- (9CI) (CA INDEX NAME)

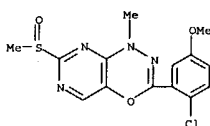
L4 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 691864-36-5 CAPLUS
CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazine,
3-(2-chloro-5-methoxyphenyl)-1-methyl-
7-(methylthio)- (9CI) (CA INDEX NAME)

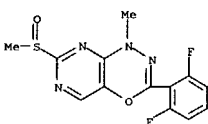


RN 691864-37-6 CAPLUS
CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazine,
3-(2-chloro-5-methoxyphenyl)-1-methyl-
7-(methylsulfinyl)- (9CI) (CA INDEX NAME)

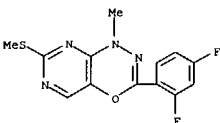


RN 691864-40-1 CAPLUS
CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazine, 3-(2-methoxyphenyl)-1-methyl-7-
(methylthio)- (9CI) (CA INDEX NAME)

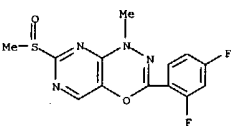
L4 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



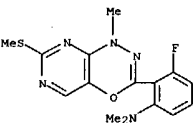
RN 691864-48-9 CAPLUS
CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazine, 3-(2,4-difluorophenyl)-1-methyl-7-
(methylthio)- (9CI) (CA INDEX NAME)



RN 691864-49-0 CAPLUS
CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazine, 3-(2,4-difluorophenyl)-1-methyl-7-
(methylsulfinyl)- (9CI) (CA INDEX NAME)

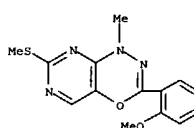


RN 691864-51-4 CAPLUS
CN Benzenamine, 3-fluoro-N,N-dimethyl-2-[1-methyl-7-(methylthio)-1H-
pyrimido[4,5-e][1,3,4]oxadiazin-3-yl]- (9CI) (CA INDEX NAME)

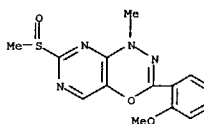


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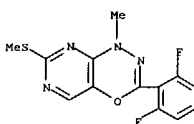
L4 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 691864-41-2 CAPLUS
CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazine, 3-(2-methoxyphenyl)-1-methyl-7-
(methylsulfinyl)- (9CI) (CA INDEX NAME)



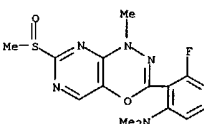
RN 691864-44-5 CAPLUS
CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazine, 3-(2,6-difluorophenyl)-1-methyl-7-
(methylthio)- (9CI) (CA INDEX NAME)



RN 691864-45-6 CAPLUS
CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazine, 3-(2,6-difluorophenyl)-1-methyl-7-
(methylsulfinyl)- (9CI) (CA INDEX NAME)

L4 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

RN 691864-52-5 CAPLUS
CN Benzenamine, 3-fluoro-N,N-dimethyl-2-[1-methyl-7-(methylsulfinyl)-1H-
pyrimido[4,5-e][1,3,4]oxadiazin-3-yl]- (9CI) (CA INDEX NAME)



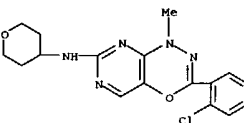
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RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)

(preparation of pyrimido[4,5-e]oxadiazines for treating p38 MAP
kinase and

FGFR kinase mediated disorders)

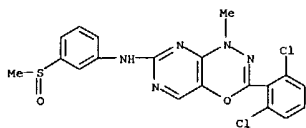
RN 691863-98-6 CAPLUS
CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazin-7-amine,
3-(2-chlorophenyl)-1-methyl-N-
(tetrahydro-2H-pyran-4-yl)- (9CI) (CA INDEX NAME)



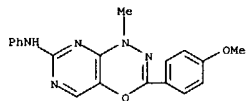
RN 691863-99-7 CAPLUS
CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazin-7-amine, 3-(2,6-dichlorophenyl)-1-
methyl-N-(3-(methylsulfinyl)phenyl)- (9CI) (CA INDEX NAME)

11/29/2004

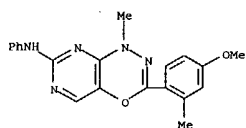
L4 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



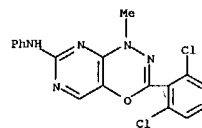
RN 691864-03-6 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazin-7-amine, 3-(4-methoxyphenyl)-1-methyl-N-phenyl- (9CI) (CA INDEX NAME)



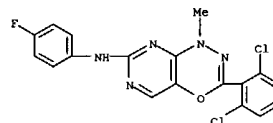
RN 691864-07-0 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazin-7-amine, 3-(4-methoxy-2-methylphenyl)-1-methyl-N-phenyl- (9CI) (CA INDEX NAME)



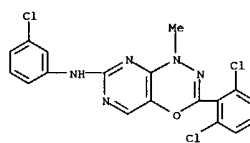
RN 691864-11-6 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazin-7-amine, 3-(2,6-dichlorophenyl)-1-methyl-N-phenyl- (9CI) (CA INDEX NAME)



RN 691864-12-7 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazin-7-amine, 3-(2,6-dichlorophenyl)-N-(4-fluorophenyl)-1-methyl- (9CI) (CA INDEX NAME)



RN 691864-13-8 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazin-7-amine, N-(3-chlorophenyl)-3-(2,6-dichlorophenyl)-1-methyl- (9CI) (CA INDEX NAME)

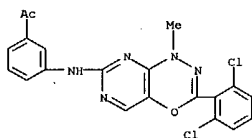


RN 691864-15-0 CAPLUS
 CN Ethanone, 1-[[3-[(2,6-dichlorophenyl)-1-methyl-1H-pyrimido[4,5-e][1,3,4]oxadiazin-7-yl]amino]phenyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

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CRN 691864-14-9
 CMF C20 H15 Cl2 N5 O2

L4 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



CM 2

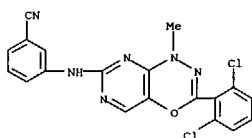
CRN 76-05-1
 CMF C2 H F3 O2



RN 691864-17-2 CAPLUS
 CN Benzonitrile, 3-[[3-[(2,6-dichlorophenyl)-1-methyl-1H-pyrimido[4,5-e][1,3,4]oxadiazin-7-yl]amino]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 691864-16-1
 CMF C19 H12 Cl2 N6 O



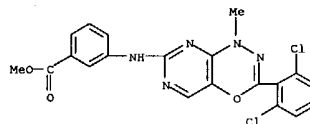
CM 2

CRN 76-05-1
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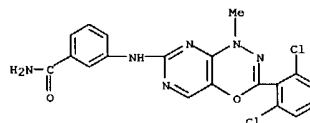
L4 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



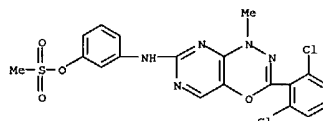
RN 691864-18-3 CAPLUS
 CN Benzoic acid, 3-[[3-[(2,6-dichlorophenyl)-1-methyl-1H-pyrimido[4,5-e][1,3,4]oxadiazin-7-yl]amino]-, methyl ester (9CI) (CA INDEX NAME)



RN 691864-19-4 CAPLUS
 CN Benzamide, 3-[[3-[(2,6-dichlorophenyl)-1-methyl-1H-pyrimido[4,5-e][1,3,4]oxadiazin-7-yl]amino]- (9CI) (CA INDEX NAME)



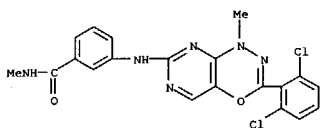
RN 691864-22-9 CAPLUS
 CN Phenol, 3-[[3-[(2,6-dichlorophenyl)-1-methyl-1H-pyrimido[4,5-e][1,3,4]oxadiazin-7-yl]amino]-, methanesulfonate (ester) (9CI) (CA INDEX NAME)



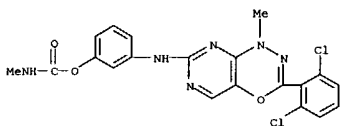
RN 691864-23-0 CAPLUS

11/29/2004

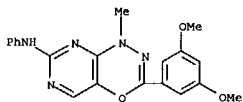
L4 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
 CN Benzamide, 3-[(3-(2,6-dichlorophenyl)-1-methyl-1H-pyrimido[4,5-e][1,3,4]oxadiazin-7-yl)amino]-N-methyl- (9CI) (CA INDEX NAME)



RN 691864-24-1 CAPLUS
 CN Phenol, 3-[(3-(2,6-dichlorophenyl)-1-methyl-1H-pyrimido[4,5-e][1,3,4]oxadiazin-7-yl)amino]-, methylcarbamate (ester) (9CI) (CA INDEX NAME)



RN 691864-28-5 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazin-7-amine, 3-(3,5-dimethoxyphenyl)-1-methyl-N-phenyl- (9CI) (CA INDEX NAME)

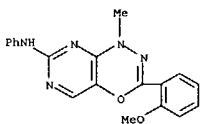


RN 691864-29-6 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazin-7-amine, 3-(3,5-dimethoxyphenyl)-N-(4-fluorophenyl)-1-methyl- (9CI) (CA INDEX NAME)

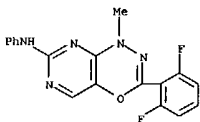


L4 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

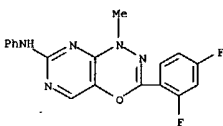
RN 691864-42-3 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazin-7-amine, 3-(2-methoxyphenyl)-1-methyl-N-phenyl- (9CI) (CA INDEX NAME)



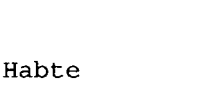
RN 691864-46-7 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazin-7-amine, 3-(2,6-difluorophenyl)-1-methyl-N-phenyl- (9CI) (CA INDEX NAME)



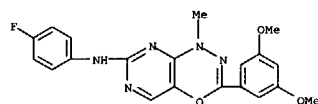
RN 691864-50-3 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazin-7-amine, 3-(2,4-difluorophenyl)-1-methyl-N-phenyl- (9CI) (CA INDEX NAME)



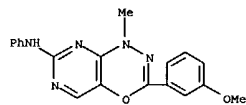
RN 691864-53-6 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazin-7-amine, 3-(2-(dimethylamino)-6-fluorophenyl)-1-methyl-N-phenyl- (9CI) (CA INDEX NAME)



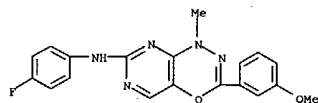
L4 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



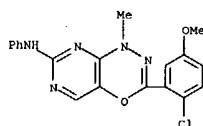
RN 691864-33-2 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazin-7-amine, 3-(3-methoxyphenyl)-1-methyl-N-phenyl- (9CI) (CA INDEX NAME)



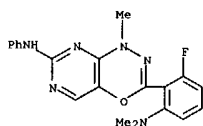
RN 691864-34-3 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazin-7-amine, N-(4-fluorophenyl)-3-(3-methoxyphenyl)-1-methyl- (9CI) (CA INDEX NAME)



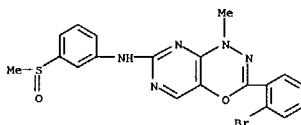
RN 691864-38-7 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazin-7-amine, 3-(2-chloro-5-methoxyphenyl)-1-methyl-N-phenyl- (9CI) (CA INDEX NAME)



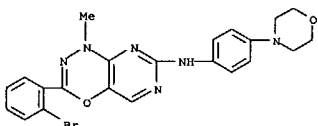
L4 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



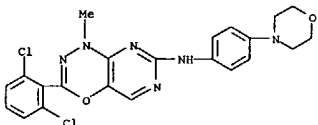
RN 691864-54-7 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazin-7-amine, 3-(2-bromophenyl)-1-methyl-N-(3-(methylsulfinyl)phenyl)- (9CI) (CA INDEX NAME)



RN 691864-55-8 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazin-7-amine, 3-(2-bromophenyl)-1-methyl-N-[4-(4-morpholinyl)phenyl]- (9CI) (CA INDEX NAME)

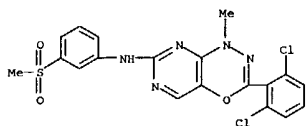


RN 691864-56-9 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazin-7-amine, 3-(2,6-dichlorophenyl)-1-methyl-N-[4-(4-morpholinyl)phenyl]- (9CI) (CA INDEX NAME)



L4 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

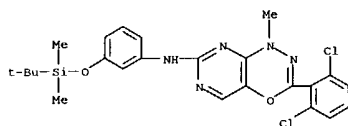
RN 691864-62-7 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazin-7-amine, 3-(2,6-dichlorophenyl)-1-methyl-N-[3-(methylsulfonyl)phenyl]- (9CI) (CA INDEX NAME)



IT 691864-20-7P 691864-59-2P 691864-60-5P
 691864-61-6P 691864-65-0P 691864-66-1P
 691864-67-2P

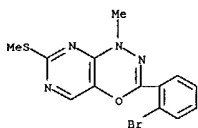
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of pyrimido[4,5-e]oxadiazines for treating p38 MAP kinase and FGFR kinase mediated disorders)

RN 691864-20-7 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazin-7-amine, 3-(2,6-dichlorophenyl)-N-[3-[(1,1-dimethylethyl)dimethylsilyl]oxy]phenyl]-1-methyl- (9CI) (CA INDEX NAME)

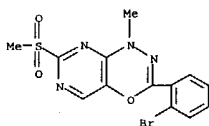


RN 691864-59-2 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazine, 3-(2-chlorophenyl)-1-methyl-7-(methylthio)- (9CI) (CA INDEX NAME)

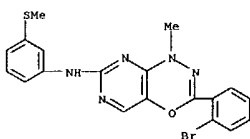
L4 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



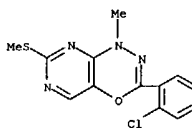
RN 691864-66-1 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazine, 3-(2-bromophenyl)-1-methyl-7-(methylsulfonyl)- (9CI) (CA INDEX NAME)



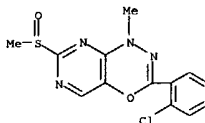
RN 691864-67-2 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazin-7-amine, 3-(2-bromophenyl)-1-methyl-N-[3-(methylthio)phenyl]- (9CI) (CA INDEX NAME)



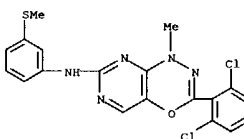
L4 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 691864-60-5 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazine, 3-(2-chlorophenyl)-1-methyl-7-(methylsulfonyl)- (9CI) (CA INDEX NAME)



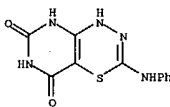
RN 691864-61-6 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazin-7-amine, 3-(2,6-dichlorophenyl)-1-methyl-N-[3-(methylthio)phenyl]- (9CI) (CA INDEX NAME)



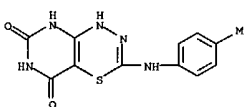
RN 691864-65-0 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazine, 3-(2-bromophenyl)-1-methyl-7-(methylthio)- (9CI) (CA INDEX NAME)

L4 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1996:120336 CAPLUS
 DOCUMENT NUMBER: 124:289412
 TITLE: On the synthesis of new 2-alkyl/arylamino-4H-pyrimido[4,5-e][1,3,4]thiadiazine-6,8-(5H,7H)-diones and 2-alkyl/arylimino-3-anilino-2,3-dihydropyrimido[4,5-d]thiazole-5,7-(4H,6H)-diones
 AUTHOR(S): Chande, Madhukar S.; Joshi, Rajesh D.
 CORPORATE SOURCE: Dep. Chem., Inst. Sci., Bombay, 400 032, India
 SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1996), 35B(3), 251-5
 CODEN: IJSBDB; ISSN: 0376-4699
 PUBLISHER: Publications & Information Directorate, CSIR
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The title compds. have been prepared by the interaction of 5-bromobarbituric acid with thiosemicarbazides. An alternate unambiguous synthesis of pyrimido[4,5-d]thiazoline has been reported.
 IT 175653-69-7P 175653-70-0P 175653-71-1P
 175653-72-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 175653-69-7 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]thiadiazine-5,7-(6H,8H)-dione, 3-(phenylamino)- (9CI) (CA INDEX NAME)

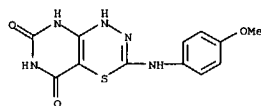


RN 175653-70-0 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]thiadiazine-5,7-(6H,8H)-dione, 3-[(4-methylphenyl)amino]- (9CI) (CA INDEX NAME)

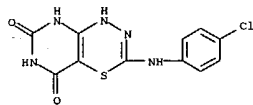


RN 175653-71-1 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]thiadiazine-5,7-(6H,8H)-dione, 3-[(4-methoxyphenyl)amino]- (9CI) (CA INDEX NAME)

L4 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

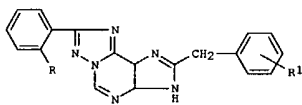


RN 175653-72-2 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]thiadiazine-5,7(6H,8H)-dione,
 3-[(4-chlorophenyl)amino]- (9CI) (CA INDEX NAME)

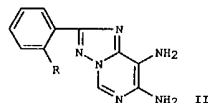


L4 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1995:137252 CAPLUS
 DOCUMENT NUMBER: 122:81275
 TITLE: Synthesis of 2,8-disubstituted 1,2,4-triazolo[5,1-i]purines
 AUTHOR(S): Gatta, Franco; Del Giudice, Maria Rosaria; Borioni, Anna; Mustazza, Carlo; Fazio, Cristina
 CORPORATE SOURCE: Lab. Chim. Farmaco, Ist. Sup. Sanita, Roma, 00161, Italy
 SOURCE: Journal of Heterocyclic Chemistry (1994), 31(5), 1171-6
 CODEN: JHTCAD; ISSN: 0022-152X
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI



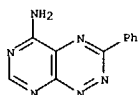
I



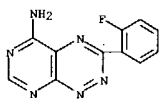
II

AB This paper describes the preparation of 2-aryl-8-(fluorobenzyl)-1,2,4-triazolo[5,1-i]purines (I; R = H, F; R1 = 2-P, 4-F), starting from 2-aryl-7,8-diamino-1,2,4-triazolo[1,5-c]pyrimidines (II; R = H, F). Our synthetic procedure represents the first example of a feasible approach to the synthesis of 2,8-disubstituted triazolo[5,1-i]purines. New syntheses of 5-amino-3-arylpyrimido[5,4-e]-1,2,4-triazines and 8-(fluorobenzyl)-6-hydrazinopurines are also reported.
 IT 159976-59-7P 159976-60-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 RN 159976-59-7 CAPLUS
 CN Pyrimido[5,4-e]-1,2,4-triazin-5-amine, 3-phenyl- (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

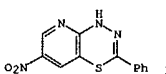


RN 159976-60-0 CAPLUS
 CN Pyrimido[5,4-e]-1,2,4-triazin-5-amine, 3-(2-fluorophenyl)- (9CI) (CA INDEX NAME)



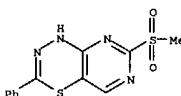
L4 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1981:532826 CAPLUS
 DOCUMENT NUMBER: 95:132826
 TITLE: Reactions of benzothiohydrazide as a bidentate nucleophile
 AUTHOR(S): Elliott, Arthur J.
 CORPORATE SOURCE: Chem. Res. Dep. Med., Schering-Plough Pharm. Res. Div., Bloomfield, NJ, 07003, USA
 SOURCE: Journal of Heterocyclic Chemistry (1981), 18(4), 799-800
 CODEN: JHTCAD; ISSN: 0022-152X
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 95:132826
 GI

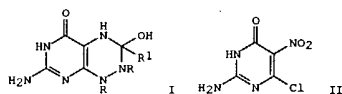


I

AB PhCSNHNH2 acts as a 1,4-bidentate nucleophile under basic conditions, and condenses with suitably substituted pyridines, pyrimidines, and quinoxalines to yield ring-fused-1,3,4-thiadiazines unsubstituted on the 4-nitrogen position. Thus, condensation of PhCSNHNH2 with 2-chloro-3,5-dinitropyridine in refluxing DMF gave 22% I.
 IT 79091-21-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 RN 79091-21-7 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]thiadiazine, 7-(methylsulfonyl)-3-phenyl- (9CI) (CA INDEX NAME)

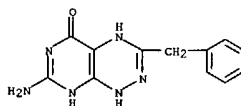


L4 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1981:15687 CAPLUS
 DOCUMENT NUMBER: 94:15687
 TITLE: Specific enzyme inhibitors in vitamin biosynthesis.
 Part 4. The synthesis of
 pyrimido[5,4-e]-as-triazines
 and their evaluation as inhibitors of dihydrofolate
 biosynthesis
 AUTHOR(S): Al-Hassan, Saieba S.; Stirling, Irene; Wood, Hamish
 C.
 CORPORATE SOURCE: S.
 Dep. Pure Appl. Chem., Univ. Strathclyde, Glasgow, G1
 1XL, UK
 SOURCE: Journal of Chemical Research, Synopses (1980), (9),
 278-9
 CODEN: JRPSDC; ISSN: 0308-2342
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI



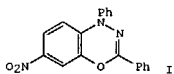
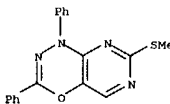
AB The hydrated dihydropyrimidotriazines I (R = H, Me; R1 = Me, CH2Ph, CH2OH) were prepared and found to be inactive as enzyme inhibitors. I were prepared from the pyrimidine II by sequential amination and cyclization, or by sequential amination, acylation and cyclization. Thus, H2NNHAc reacted with II in EtOH containing Et3N to give 61% of the (acetylhydrazino)pyrimidine, which was cyclized by treatment with hot aqueous Na2S2O4 to give 67% I (R = H, R1 = Me).
 IT 76001-87-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and evaluation of, as enzyme inhibitor)
 RN 76001-87-1 CAPLUS
 CN Pyrimido[5,4-e]-1,2,4-triazin-5(1H)-one, 7-amino-2,6-dihydro-3-(phenylmethyl)- (9CI) (CA INDEX NAME)

L4 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

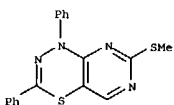


L4 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1980:550221 CAPLUS
 DOCUMENT NUMBER: 93:150221
 TITLE: Hydrazides and thiohydrazides as sources of condensed oxadiazines and thiadiazines, including novel azo derivatives based on dithizone
 AUTHOR(S): Elliott, Arthur J.; Gibson, Martin S.
 CORPORATE SOURCE: Dep. Chem., McMaster Univ., Hamilton, ON, Can.
 SOURCE: Journal of Organic Chemistry (1980), 45(18), 3677-81
 CODEN: JOCEAH; ISSN: 0022-3263
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 93:150221
 GI

L4 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



AB Condensation reactions of N'-phenylbenzohydrazide, N'-phenylbenzothiohydrazide, and dithizone with a variety of activated aromatic and heteroarom. 1,2-dihalo and 1-halo-2-nitro compds. are described in which the hydrazide or thiohydrazide functions as a bidentate nucleophile. These reactions lead to derivs. of the 4H-1,3,4-benzoxadiazines e.g. I, and 4H-1,3,4-benzothiadiazines and analogous pyrimido-, pyrazino-, and quinoxalinoxadiazines and -thiadiazines, which are representative of new ring systems. The corresponding reaction of N'-phenylbenzothiohydrazide with chloranil proceeds with expulsion of S.
 IT 63810-92-4P 74298-49-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 63810-92-4 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]thiadiazine, 7-(methylthio)-1,3-diphenyl- (9CI) (CA INDEX NAME)



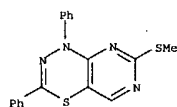
RN 74298-49-0 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]oxadiazine, 7-(methylthio)-1,3-diphenyl- (9CI) (CA INDEX NAME)

L4 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1977:553420 CAPLUS
 DOCUMENT NUMBER: 87:153420
 TITLE: 2,4-Diaryl[1,3,4H]thiadiazines fused to quinoxalines
 INVENTOR(S): Elliott, Arthur John
 PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA
 SOURCE: U.S., 10 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

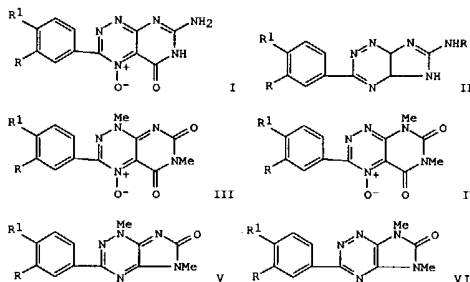
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|----------|
| US 4025510 | A | 19770524 | US 1975-636792 | 19751201 |

PRIORITY APPLN. INFO.: US 1975-636792 19751201

GI For diagram(s), see printed CA Issue.
 AB 2,4-Diaryl-1,3,4-thiadiazines (I, R = Ph, substituted Ph, 4-quinolinyl;
 R1 = Ph, substituted Ph; A = quinoxaline, pyrazine, pyrimidine, pyridine, pyridazine residue) are prepared and used to dye polyester fibers fast yellow shades. Thus, a mixture of N-thiobenzoyl-N'-phenylhydrazine [13437-75-7], 2,3-dichloroquinoxaline [2213-63-0], and Et3N were refluxed in MeCN to give II [63811-31-4]. The other 34 I were similarly prepared
 63810-92-4
 IT RL: TEM (Technical or engineered material use); USES (Uses)
 (dye, for polyester fibers, preparation of)
 RN 63810-92-4 CAPLUS
 CN 1H-Pyrimido[4,5-e][1,3,4]thiadiazine, 7-(methylthio)-1,3-diphenyl- (9CI)
 (CA INDEX NAME)

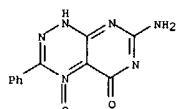


L4 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1977:43663 CAPLUS
 DOCUMENT NUMBER: 86:43663
 TITLE: 6-Azapurines (imidazo[4,5-e]-as-triazines)
 AUTHOR(S): Yoneda, Fumio; Nagamura, Tetuya; Kawamura, Mitsuko
 CORPORATE SOURCE: Fac. Pharm. Sci., Kumamoto Univ., Kumamoto, Japan
 SOURCE: Journal of the Chemical Society, Chemical Communications (1976), (16), 658-9
 CODEN: JCCCAT; ISSN: 0022-4936
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 86:43663
 GI

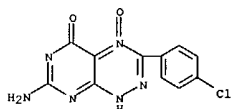


AB The pyrimidotriazines I (R = H, R1 = H, Cl, OMe; R = R1 = Cl), prepared by sequential oxidative nitrosation and cyclization of the corresponding pyrimidin-6-ylhydrazones of aromatic aldehydes, underwent reductive ring contraction on treatment with Ac2O (reflux, 3 hr) or NaOH-MeOH (reflux, 2 hr) to give 33-47% imidazotriazines II (R = Ac) or 69-72% II (R = H) resp.
 Similar treatment of the toxoflavin oxides III and the fervenulin oxides IV (R = H, R1 = H, Cl; R = R1 = Cl) with NaOH-MeOH gave 38-45% 1H-imidazotriazinones V and 48-58% 5H-imidazotriazinones VI, resp.
 IT 61602-08-2P 61602-09-3P 61602-10-6P 61602-11-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reductive ring contraction of)
 RN 61602-08-2 CAPLUS

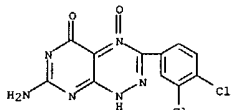
L4 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
 CN Pyrimido[5,4-e]-1,2,4-triazin-5(1H)-one, 7-amino-3-phenyl-, 4-oxide (9CI)
 (CA INDEX NAME)



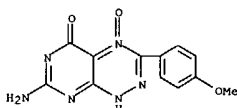
RN 61602-09-3 CAPLUS
 CN Pyrimido[5,4-e]-1,2,4-triazin-5(1H)-one, 7-amino-3-(4-chlorophenyl)-, 4-oxide (9CI) (CA INDEX NAME)



RN 61602-10-6 CAPLUS
 CN Pyrimido[5,4-e]-1,2,4-triazin-5(1H)-one, 7-amino-3-(3,4-dichlorophenyl)-, 4-oxide (9CI) (CA INDEX NAME)



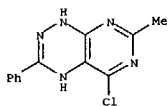
RN 61602-11-7 CAPLUS
 CN Pyrimido[5,4-e]-1,2,4-triazin-5(1H)-one, 7-amino-3-(4-methoxyphenyl)-, 4-oxide (9CI) (CA INDEX NAME)



L4 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1974:449706 CAPLUS
 DOCUMENT NUMBER: 81:49706
 TITLE: Pyrimidotriazines
 INVENTOR(S): Andrews, Kenneth John M.; Tong, Brian P.
 PATENT ASSIGNEE(S): Hoffman-La Roche Inc.
 SOURCE: U.S., 9 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

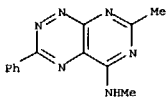
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| US 3813393 | A | 19740528 | US 1972-265879 | 19720623 |
| PRIORITY APPLN. INFO.: US 1972-265879 19720623 | | | | |

GI For diagram(s), see printed CA Issue.
 AB Pyrimidotriazines I (R = Me, Et, n-hexyl, Ph, CF₃, CH₂Ph, CH₂Me₃; R₁ = H, Me, Ph; R₂ = H, Me, allyl, CH₂C.tplbond.CH, cyclopropyl, Et, CHMe₂, Bu, OH, CH₂CH₂OH, Ac, COEt, COCHMe₂, COC₆H₄Cl-p, R₃ = H; NR₂R₃ = NMe₂ NET₂, morpholino) were prepared by treating the dichloropyrimidines II (R₄ = with N₂H₄, cyclizing II (R₄ = NNNH₂) with R₁C(OEt)₃ and treating with R₂R₃NH, or by transaminating I (R₂ = R₃ = Me). I (R = Me, Et, R₁-R₃ = H) had an anti-inflammatory ED₅₀ against Mycobacterium butyricum-induced rat paw edema of 9 and 1.9 mg/kg orally, resp. I (R = Et, R₁ = R₃ = H, R₂ = CH₂CH₂OH) was diuretic in rats at 3 mg/kg i.p. and a.c.
 IT 39906-13-3P 39906-15-5P 39906-19-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and amination of)
 RN 39906-13-3 CAPLUS
 CN Pyrimido[5,4-e]-1,2,4-triazine, 5-chloro-1,2-dihydro-7-methyl-3-phenyl- (9CI) (CA INDEX NAME)

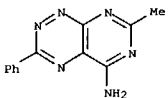


RN 39906-15-5 CAPLUS
 CN Pyrimido[5,4-e]-1,2,4-triazine, 5-chloro-1,2-dihydro-7-methyl-3-phenyl-, hydrochloride (9CI) (CA INDEX NAME)

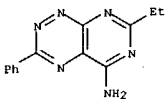
L4 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



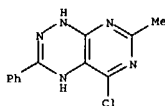
RN 39906-17-7 CAPLUS
 CN Pyrimido[5,4-e]-1,2,4-triazine-5-amine, 7-methyl-3-phenyl- (9CI) (CA INDEX NAME)



RN 39906-18-8 CAPLUS
 CN Pyrimido[5,4-e]-1,2,4-triazine-5-amine, 7-ethyl-3-phenyl- (9CI) (CA INDEX NAME)

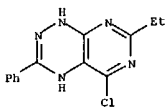


L4 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



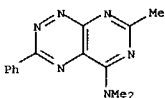
•x HCl

RN 39906-19-9 CAPLUS
 CN Pyrimido[5,4-e]-1,2,4-triazine, 5-chloro-7-ethyl-1,2-dihydro-3-phenyl- (9CI) (CA INDEX NAME)



IT 39906-14-4P 39906-16-6P 39906-17-7P
 39906-18-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 39906-14-4 CAPLUS
 CN Pyrimido[5,4-e]-1,2,4-triazine-5-amine, N,N,7-trimethyl-3-phenyl- (9CI) (CA INDEX NAME)



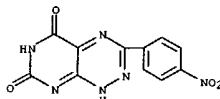
RN 39906-16-6 CAPLUS
 CN Pyrimido[5,4-e]-1,2,4-triazine-5-amine, N,N,7-dimethyl-3-phenyl- (9CI) (CA INDEX NAME)

L4 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN

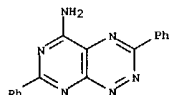
ACCESSION NUMBER: 1973:546559 CAPLUS
 DOCUMENT NUMBER: 79:146559
 TITLE: 7-Azalumazines
 INVENTOR(S): Yoneda, Fumio; Chuma, Issa
 SOURCE: Jpn. Tokkyo Koho, 16 pp.
 CODEN: JAXXAD
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| JP 48025200 | B4 | 19730726 | JP 1970-35430 | 19700427 |
| PRIORITY APPLN. INFO.: JP 1970-35430 19700427 | | | | |

GI For diagram(s), see printed CA Issue.
 AB 7-Azalumazines, most of them of formula I (R = H, alkyl, PhCH₂, PhCH:CH, substituted phenyl, pyridyl, 2-furyl, 2-thienyl, 3-indolyl, 1-adamantyl, or steroidal residues, R₁ = H, Me, Et, Ph, Me₂N, morpholino, piperazino, pyrrolidino, R₂ = H, Me, Et, 2-hydroxyethyl) were prepared from 6-amino-5-nitrosouracils and hydrazones RCH:NNH₂. Thus, an equimolar mixture of 6-amino-1,3-dimethyl-5-nitrosouracil, 3% H₂O, and 80% N₂H₄
 in DMF was stirred for 10 min and refluxed for 3 hr to give 40% I (R = H, R₁ = R₂ = Me). Among 34 more I prepared were those where R = Cl₃C, o-hydroxyphenyl, or p-dimethylaminophenyl, R₁ = R₂ = Me; R = p-nitrophenyl, R₁ = R₂ = H; and R = 4-pyridyl, R₁ = Me₂N, R₂ = Me. Similarly, 6,6'-bis(1,3-dimethyl-7-azalumazine), its p-phenylene-bis analog, and 3,5-bis(1,3-dimethyl-7-azalumazin-6-yl)pyridine were prepared
 IT 50650-71-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 50650-71-0 CAPLUS
 CN Pyrimido[5,4-e]-1,2,4-triazine-5,7(1H,6H)-dione, 3-(4-nitrophenyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1973:432011 CAPLUS
 DOCUMENT NUMBER: 79:32011
 TITLE: Pteridines. XXVII. New synthetic route to pteridines and 7-azapteridines
 AUTHOR(S): Taylor, Edward C.; Martin, Stephen F.; Maki, Y.; Beardsley, G. P.
 CORPORATE SOURCE: Dep. Chem., Princeton Univ., Princeton, NJ, USA
 SOURCE: Journal of Organic Chemistry (1973), 38(12), 2238-40
 CODEN: JOCEAH; ISSN: 0022-3263
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI For diagram(s), see printed CA Issue.
 AB New synthetic routes to pteridines, e.g., I, and 7-azapteridines, e.g., II, from 7-aminofurazano[3,4-d]pyrimidines are described.
 IT 39550-24-8P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 39550-24-8 CAPLUS
 CN Pyrimido[5,4-e]-1,2,4-triazin-5-amine, 3,7-diphenyl- (9CI) (CA INDEX NAME)

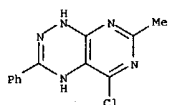


L4 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1973:97722 CAPLUS
 DOCUMENT NUMBER: 78:97722
 TITLE: Antiinflammatory 5-aminopyrimido[5,4-e]-as-triazines
 INVENTOR(S): Andrews, Kenneth J. M.; Tong, Brian Peter
 PATENT ASSIGNEE(S): Hoffmann-La Roche, F., und Co., A.-G.
 SOURCE: Ger. Offen., 49 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

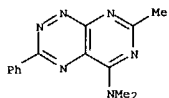
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| DE 2233242 | A1 | 19730125 | DE 1972-2233242 | 19720706 |
| GB 1353534 | A | 19740522 | GB 1972-13116 | 19720321 |
| ZA 7204061 | A | 19730328 | ZA 1972-4061 | 19720613 |
| AU 7243532 | A1 | 19731220 | AU 1972-43532 | 19720616 |
| NL 7208756 | A | 19730116 | NL 1972-8756 | 19720626 |
| BE 786129 | A1 | 19730111 | BE 1972-119737 | 19720711 |
| FR 2145591 | A1 | 19730223 | FR 1972-25081 | 19720711 |
| AT 317903 | B | 19740925 | AT 1972-5965 | 19720712 |
| AT 321313 | B | 19750325 | AT 1973-9339 | 19720712 |
| PRIORITY APPLN. INFO.: | | | GB 1971-32801 | 19710713 |
| | | | GB 1971-37049 | 19710806 |
| | | | GB 1972-13116 | 19720321 |

GI For diagram(s), see printed CA Issue.
 AB Thirty-three title compds. (I: R = Me, Et, Me3CCH2, C6H13, F3C, Ph, or PhCH2; R1 = H, Me, or Ph; R2 = H, Me, or Et; R3 = OH, Me, Et, CHMe2, Bu, CH2CH:CH2, CH2C.tplbond.CH, CH2CH2OH, cyclopropyl, Ac, COEt, COCHMe2, or COC6H4Cl-p; or NR2R3 = morpholino) were prepared mainly by reaction of the chloro derivs. II with HNR2R3 or with NaN3 optionally followed by reaction of the resulting I (R2 = R3 = H) with R3NH2 or acylation. I had antiinflammatory activity and were also useful as diuretics. Thus, III(R = Me) reacted with N2H4.H2O at 30-5° to give IV (R = Me) (VI). HCl-ETOH was added to HC(OEt)3 in ETOH and V at <30° and the mixture stirred 2 hr to give II.HCl (R = Me, R1 = H). NaN3 was added to the free base and the mixture refluxed 2 hr in ETOH to give I (R = Me, R1 = R3 = H) (VI). VI, MeNH2.HCl, and 25-30% aqueous MeNH2 solution were refluxed 5 hr in MeOH, to give I (R = R3 = Me, R1 = R2 = H). II (R = Me, R1 = Ph) and 33% ETOH-Me2NH in ETOH were stirred overnight to give I (R = R2 = R3 = Me, R1 = Ph).
 IT 39906-13-3 39906-14-4 39906-19-9
 RL: RCT (Reactant); RACT (Reactant or reagent) (amination of)
 RN 39906-13-3 CAPLUS
 CN Pyrimido[5,4-e]-1,2,4-triazine, 5-chloro-1,2-dihydro-7-methyl-3-phenyl- (9CI) (CA INDEX NAME)

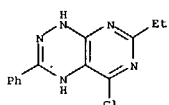
L4 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 39906-14-4 CAPLUS
 CN Pyrimido[5,4-e]-1,2,4-triazin-5-amine, N,N,7-trimethyl-3-phenyl- (9CI) (CA INDEX NAME)

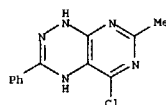


RN 39906-19-9 CAPLUS
 CN Pyrimido[5,4-e]-1,2,4-triazine, 5-chloro-7-ethyl-1,2-dihydro-3-phenyl- (9CI) (CA INDEX NAME)



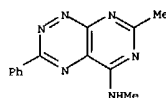
IT 39906-15-5P 39906-16-6P 39906-17-7P
 39906-18-8P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 39906-15-5 CAPLUS
 CN Pyrimido[5,4-e]-1,2,4-triazine, 5-chloro-1,2-dihydro-7-methyl-3-phenyl-, hydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

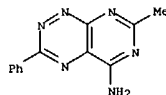


•x HCl

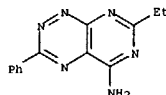
RN 39906-16-6 CAPLUS
 CN Pyrimido[5,4-e]-1,2,4-triazin-5-amine, N,7-dimethyl-3-phenyl- (9CI) (CA INDEX NAME)



RN 39906-17-7 CAPLUS
 CN Pyrimido[5,4-e]-1,2,4-triazin-5-amine, 7-methyl-3-phenyl- (9CI) (CA INDEX NAME)

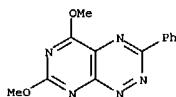


RN 39906-18-8 CAPLUS
 CN Pyrimido[5,4-e]-1,2,4-triazin-5-amine, 7-ethyl-3-phenyl- (9CI) (CA INDEX NAME)



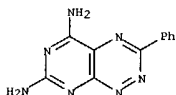
L4 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

L4 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1972:564641 CAPLUS
 DOCUMENT NUMBER: 77:164641
 TITLE: Aza-analogs of pteridine. VI. 3-Alkyl-5-(and 7)-aminopyrimido[5,4-e]as-triazines and related compounds
 AUTHOR(S): Brown, D. J.; Kershaw, J. R.
 CORPORATE SOURCE: Dep. Med. Chem., John Curtin Sch. Med. Res., Canberra, Australia
 SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1972), (18), 2316-19
 CODEN: JCPRB4; ISSN: 0300-922X
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI For diagram(s), see printed CA Issue.
 AB 4-[N'-(1-Ethoxypropylidene)hydrazino]-2-methoxy-5-nitropyrimidine (I) cyclized to 3-ethyl-5,7-dimethoxypyrimido[5,4-e]-as-triazine (II), which underwent ammonolysis to 5-amino-3-ethyl-7-methoxypyrimido[5,4-e]-as-triazine and its 5,7-diamino analog. Hydrolysis of II gave 3-ethyl-7-methoxypyrimidotriazin-5(6H)-one, which underwent ammonolysis to its 7-amino analog. In boiling PhMe I isomerized to 3-ethoxy-3-ethyl-2,3-dihydro-5-methoxy-8-nitro-s-triazolo[4,3-c]pyrimidine. 5-Amino-3-(methylthio)-as-triazine-6-carboxamide was converted by Vilsmeier reagents into 8-chloro-6-(dimethylamino)-5,6-dihydro-3-(methylthio)pyrimido[4,5-e]-as-triazine, or by HC(OEt)3 into 3-(methylthio)pyrimido[4,5-e]-as-triazin-8(7H)-one.
 IT 38713-86-9P 38713-87-0P 38713-92-7P
 38713-93-8P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 38713-86-9 CAPLUS
 CN Pyrimido[5,4-e]-1,2,4-triazine, 5,7-dimethoxy-3-phenyl- (9CI) (CA INDEX NAME)

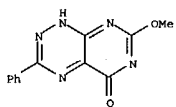


RN 38713-87-0 CAPLUS
 CN Pyrimido[5,4-e]-1,2,4-triazine-5,7-diamine, 3-phenyl- (9CI) (CA INDEX NAME)

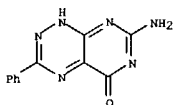
L4 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



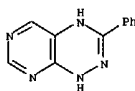
RN 38713-92-7 CAPLUS
 CN Pyrimido[5,4-e]-1,2,4-triazin-5(1H)-one, 7-methoxy-3-phenyl- (9CI) (CA INDEX NAME)



RN 38713-93-8 CAPLUS
 CN Pyrimido[5,4-e]-1,2,4-triazin-5(1H)-one, 7-amino-3-phenyl- (9CI) (CA INDEX NAME)



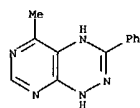
L4 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1965:29710 CAPLUS
 DOCUMENT NUMBER: 62:29710
 ORIGINAL REFERENCE NO.: 62:5280b-c
 TITLE: Polyzanaphthalenes. I. Synthesis of pyrimido[5,4-e]-as-triazines
 AUTHOR(S): Polya, J. B.; Shanks, G. F.
 CORPORATE SOURCE: Univ. Tasmania, Australia
 SOURCE: Journal of the Chemical Society, Abstracts (1964), (Dec.), 4986-92
 CODEN: JCSAAZ; ISSN: 0590-9791
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 62:29710
 GI For diagram(s), see printed CA Issue.
 AB 2,4-Dichloro-5-nitropyrimidines are converted into unsym. 4-hydrazino derivs. by careful treatment with acylhydrazines. Reduction of the nitro group and cyclization affords derivs. (I) of dihydropyrimido[5,4-e]-as-triazine; one of these compds. was oxidized to the "aromatic" substance (II).
 IT 2083-48-9, Pyrimido[5,4-e]-as-triazine, 1,2-dihydro-3-phenyl-, hydrochloride 94734-76-6, Pyrimido[5,4-e]-as-triazine, 1,2-dihydro-5-methyl-3-phenyl-, hydrochloride 98469-55-7, Pyrimido[5,4-e]-as-triazine, 7-anilino-1,2-dihydro-5-methyl-3-phenyl-, hydrochloride (preparation of)
 RN 2083-48-9 CAPLUS
 CN Pyrimido[5,4-e]-as-triazine, 1,2-dihydro-3-phenyl-, hydrochloride (7CI, 8CI) (CA INDEX NAME)



● HCl

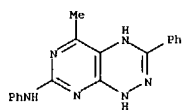
RN 94734-76-6 CAPLUS
 CN Pyrimido[5,4-e]-as-triazine, 1,2-dihydro-5-methyl-3-phenyl-, hydrochloride (7CI) (CA INDEX NAME)

L4 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



● x HCl

RN 98469-55-7 CAPLUS
CN Pyrimido[5,4-e]-as-triazine, 7-anilino-1,2-dihydro-5-methyl-3-phenyl-,
hydrochloride (7CI) (CA INDEX NAME)



● x HCl

 **PALM INTRANET**Day : Monday
Date: 11/29/2004

Time: 14:52:06

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